

REMARKS

In the Office Action dated January 14, 2004, claims 1-13 were rejected under U.S.C. §103(a) as allegedly being unpatentable over the Prior Art Fig. 1 of the present application in view of Finn et al. (U.S. Patent No. 6,351,652), which is believed to have been erroneously identified as U.S. Patent No. 6,519,464. In response, Applicant respectfully asserts that the Examiner has failed to establish a *prima facie* case of obviousness for claims 1-13, and thus, claims 1-13 cannot be deemed to be obvious over the Prior Art Fig. 1 of the present application in view of Finn et al.

In view of the following arguments, Applicant respectfully requests the allowance of the pending claims 1-13.

A. Patentability of Independent Claims 1, 7 and 13

In the Office Action, the independent claims 1, 7 and 13 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the Prior Art Fig. 1 of the present application (hereinafter "prior art wireless communication system") in view of Finn et al. Specifically, the Office Action alleges that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the impulse radio technique of Finn et al. in the prior art wireless communication system "in order to utilize very low power transmission in telecommunication system."

In rejecting the independent claims 1, 7 and 13, the Examiner has failed to establish a *prima facie* case of obviousness, as described below. Therefore, Applicant respectfully asserts that the independent claims 1, 7 and 13 cannot be deemed to be obvious, and thus, the independent claims 1, 7 and 13 should be allowed.

To establish a *prima facie* case of obviousness, the following three basic criteria must be met, as set forth in MPEP 2143:

"First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally,

the prior art reference (or references when combined) must teach or suggest all of the claim limitations."

Thus, to establish a *prima facie* case of obviousness for the independent claims 1, 7 and 13, there must be some suggestion or motivation to modify the prior art wireless communication system with the teachings of Finn et al. to derive the claimed invention, as recited in claims 1, 7 and 13. As stated in MPEP 2142 on page 2100-124, "[t]he initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)."

The independent claim 1 recites:

"A wireless communication system, comprising:

a base station communication device including a carrier wave-based transmitter and further including an ultrawideband receiver; and

a mobile communication device including a carrier wave-based receiver and further including an ultrawideband transmitter;

wherein carrier wave communications are carried out in a forward channel from said base station communication device to said mobile communication device, and ultrawide band communications are carried out in a reverse channel from said mobile device to said base station communication device."

As correctly stated in the Office Action, the prior art wireless communication system discloses a base station communication device including a carrier wave-based transmitter but not including an ultrawideband receiver, and a mobile communication device including a carrier wave-based receiver but not including an ultrawideband transmitter. In addition, Finn et al. does disclose a base station communication device including an ultrawideband receiver and a mobile communication device including an ultrawideband transmitter, as explained in the Office Action.

However, as stated above, in order to establish a *prima facie* case of obviousness for the claimed invention, as recited in claim 1, the Examiner must show that the cited references expressly or impliedly suggest the claimed invention, or

present a convincing line of reasoning to derive the claimed invention. The unsupported statement of "in order to utilize very low power transmission in telecommunication system" DOES NOT satisfy the suggestion or motivation requirement to establish a *prima facie* case of obviousness. Thus, the Examiner has not provided any suggestion or motivation found in the cited references, either expressly or impliedly, to selectively include the ultrawideband receiver of Finn et al. into the base station communication device of the prior art wireless communication system, and to selectively include the ultrawideband transmitter of Finn et al. into the mobile communication device of the prior art wireless communication system to derive the claimed invention, as recited in claim 1. Nor has the Examiner presented any convincing line of reasoning as to why one of ordinary skill in the art would have found the claimed invention to be obvious in light of the teachings of the prior art wireless communication system and Finn et al.

Therefore, the Examiner is requested to cite art supporting the assertion made in the Office Action. Alternatively, if the Examiner is aware of facts within his personal knowledge that provide the requisite factual basis and establishes the requisite motivation to support the assertion, the Examiner is explicitly requested herein to provide an affidavit in accordance with 37 C.F.R. § 1.104(d)(2). Otherwise, Applicant respectfully requests the allowance of claim 1.

The independent claims 7 and 13 recite similar limitations, and thus, are also not obvious over the prior art wireless communication system in view of Finn et al. Therefore, Applicant also requests the allowance of claims 7 and 13.

B. Patentability of Dependent Claims 2-6 and 8-12

Each of the dependent claims 2-6 and 8-12 depends on one of the independent claims 1 and 7. As such, these dependent claims include all the limitations of their respective base claims. Therefore, Applicant submits that these dependent claims are allowable for at least the same reasons as their respective base claims.

Applicant respectfully requests reconsideration of the claims in view of the remarks made herein. A notice of allowance is earnestly solicited.

Respectfully submitted,



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Response to Office Action